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Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

In the Matter of )  
 )  
Petition of SpectraLink Corporation )  
to Amend Part 15 of the Commission's ) RM No. 8609  
Rules to Reduce the Spectral )  
Occupancy of Frequency Hopping )  
Spread Spectrum Devices )

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**COMMENTS OF NORAND CORPORATION**

Norand Corporation, by its attorneys, hereby comments on the above-referenced Petition for Rule Making ("Petition") filed by SpectraLink Corporation ("SpectraLink").<sup>1</sup> The Petition asks that the Commission amend Sections 15.247(a)(1)(i) and 15.247(b) of its rules to reduce the spectral occupancy of frequency-hopping spread spectrum devices operating in the 902-928 MHz band. Specifically, SpectraLink proposes to reduce the number of permissible hopping frequencies from 50 to 25, and to reduce transmitter output power for such systems from one watt to 500 mW. Norand supports these proposals. Norand adds that, consistent with SpectraLink's proposal, the Commission should codify that spread spectrum devices operating in this band will be permitted to use non-contiguous frequencies.

<sup>1</sup> SpectraLink's Petition appeared in the Commission's Public Notice of February 28, 1995 (Rep. No. 2059).

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**I. INTRODUCTION AND INTEREST OF NORAND**

Norand is a manufacturer of portable computing devices used commercially for both indoor and mobile applications. Norand also produces premises-based wireless networking products that allow portable devices to operate without wire connections to traditional computer network infrastructures. Norand's customers employ these devices to increase worker productivity through automation, to better manage inventory, and to gather real-time market information to ensure that their customers' needs are constantly being met.

Norand has grown significantly in its twenty-five years in existence, experiencing double digit growth rates to current annual sales of \$193 million with profits of \$17.2 million. To maintain such a strong growth rate, to improve current products and to develop new markets, Norand consistently reinvests a significant portion of its revenues (10.6 percent in 1994) in research and development.

**II. DISCUSSION**

Norand's equipment line includes several frequency hopping devices which operate in the 902-928 MHz band. In its Petition, SpectraLink argues that by reducing the number of hopping frequencies and lowering the maximum power level the Commission will enable manufacturers of such devices to produce products which reduce the threat of interference to Location Monitoring Systems ("LMS"). The Commission recently adopted a *Report and Order* which addressed the contentious interference issues rooted in LMS and

Part 15 devices' co-occupancy of the 902-928 MHz band.<sup>2</sup> After much debate, the Commission established operating parameters aimed at minimizing the interference potential.<sup>3</sup> Norand concurs with SpectraLink's basic premise that the Commission's efforts can be improved upon, and the potential for interference can be reduced even further, by reducing the spectral occupancy of frequency hopping devices.

Further, by reducing spectral occupancy, the Commission will promote the continued development of Part 15 devices at 902-928 MHz. Norand has invested substantial resources in research and development of 902-928 MHz equipment. Norand intends to continue to build on this expertise within the confines of the new rules and the new RF environment created by the proliferation of LMS. SpectraLink's proposals will facilitate that effort.

To add one point, Norand urges the Commission to amend its rules to incorporate SpectraLink's suggestion that Part 15 devices be permitted to use non-contiguous hopping frequencies in order to avoid the subsegments of this band which are allocated for wide-band multilateration LMS systems. The use of non-contiguous frequencies is an important aspect of SpectraLink's proposal. It should be made clear, by regulation, that this option is available to Part 15 manufacturers.

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<sup>2</sup> See *Amendment of Part 90 of the Commission's Rules to Adopt Regulations for Automatic Vehicle Monitoring Systems*, Report and Order, PR Docket No. 93-61, FCC 95-41 (released Feb. 6, 1995).


<sup>3</sup> *Id.* at ¶¶ 29-38.

**III. CONCLUSION**

For the reasons set forth above, Norand urges the Commission to act affirmatively on SpectraLink's Petition for Rule Making and to expeditiously initiate a proceeding based on it.

Respectfully submitted,

NORAND CORPORATION

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March 30, 1995

**CERTIFICATE OF SERVICE**

I, Marc Berejka, do hereby certify that copies of the foregoing Comments of Norand Corporation were sent via first class mail, postage prepaid, this 30th day of March, 1995 to the parties of record in this matter.

By: Marc Berejka  
Marc Berejka